

Amendments to the specification

Please amend paragraph [0026] as follows:

[0026] FIG. 7A is a perspective view showing an inside surface of a ~~unit~~ intermediate unit strip constituting the perimeter strips of the spacer grid of FIG. 4, with an outer cell grid spring, a guide vane and a guide tap provided on the ~~unit~~ intermediate unit strip;

Please amend paragraph [0033] as follows:

[0033] The spacer grid for nuclear reactor fuel assemblies according to the present invention is used in the reactor fuel assembly 101 of FIG. 1. Particularly, the spacer grid of the present invention is preferably used in a pressurized water reactor fuel assembly. As shown in FIGS. 4, 5A, 5B, 7A and 7B, the spacer grid of the present invention designated by the reference numeral 10 includes a plurality of perimeter strips (40) each of which is fabricated with a plurality of ~~unit~~ intermediate unit strips 40' and unit corner strips 40". The perimeter strips 40 encircle the intersecting inner strips 30. The unit corner strips 40" form the outermost corner cells of the spacer grid 10. Throughout this application, the ~~unit~~ intermediate unit strips 40' and the unit corner strips 40" may be referred to briefly, i.e. as the unit strip 40' and 40" respectively, for convenience. The perimeter strips 40 have a grid spring 50 on each of the ~~unit~~ intermediate unit strips 40' and the unit corner strips 40" thereof. The grid spring 50 is designed to be equiangular with a longitudinal fuel rod 125, so that the grid spring 50 is in equiangular surface contact with the fuel rod 125, and to effectively support the maximum load, and to accomplish the soundness of the reactor fuel assembly. In

the perimeter strips 40, each of the ~~unit~~ intermediate unit strips 40' has both a coolant flow guide vane 57 and a guide tap 58, while each of the unit corner strips 40" has either the guide vane 57 or the guide tap 58.

Please amend paragraph [0036]

[0036] FIG. 7A is a perspective view showing an inside surface of the ~~unit~~ intermediate unit strip 40' constituting the perimeter strips 40 of the spacer grid 10 of FIG. 4, and FIG. 7B is a perspective view showing an outside surface of the unit corner strip 40" constituting the perimeter strips 40 of the spacer grid 10. As shown in FIGS. 7A and 7B, the above-mentioned design of the inner cell grid springs 20 is adapted to the perimeter strips of the present invention. That is, the double bridge-type simple beam structure of the inner cell grid springs 20 is remodeled into a single bridge-type structure, thus producing the outer cell grid spring 50 which is used in the perimeter strips of the spacer grid 10 of FIG. 4. Due to the single bridge-type outer cell grid spring 50, the spacer grid 10 efficiently supports the fuel rods 125 in the outermost cells thereof including the outermost corner cells which have a narrow width, with the grid springs 50 of the outermost corner cells being in equiangular surface contact with the fuel rods 125. To form the single bridge-type outer cell grid spring 50 on each of the unit strips 40' and 40" of the perimeter strips 40 according to the present invention, a vertical opening 53 is formed at the central area of each unit strip 40', 40" of the perimeter strips 40, with a vertical support part 51 comprising a single bridge extending vertically between the central portions of the top and bottom edges of the vertical opening 53. The vertical support part 51 is bent at two steps. A fuel rod support part 52 is

provided at the central portion of the vertical support part 51. The fuel rod support part 52 has a conformal support surface which is specifically bent to have an outward rounded cross-section with the same radius of curvature as that of the fuel rod 125, thus being brought into equiangular surface contact with the external surface of the fuel rod 125. Such a conformal support surface of the fuel rod support part 52 is suitable for accomplishing a desired uniform contact pressure distribution of the fuel rod support part 52. In the present invention, the equiangular surface contact of the outer cell grid spring 50 with the fuel rod 125 means that the contact surfaces of the grid spring 50 and the fuel rod 125 are rounded in the same direction so that the centers of curvature of the contact surfaces of the grid spring 50 and the fuel rod 125 are placed at the same side of the contact surfaces. However, when two contact surfaces are in contact with each other, with the centers of curvature of the two contact surfaces being placed at opposite sides of the contact surfaces, the contact is so-called a "non-equiangular contact".

Please amend paragraph [0038] as follows:

[0038] As best seen in FIG. 8, each of the plurality of perimeter strips, comprising the unit intermediate unit strips 40' and the unit corner strips 40", includes the outer cell grid springs 50 which are in equiangular surface contact with the fuel rods 125. Each of the perimeter strips further has the guide vane 57 and the guide taps 58 which are alternately arranged along the upper edge of the perimeter strip. The guide vanes 57 guide the flows of the coolant in the reactor fuel assembly, and the guide taps 58 reduce interference between the

fuel rods 125 and the spacer grid 10 during an insertion or removal of the fuel rods 125 into or from the reactor core. The guide vanes 57 of the perimeter strips are the guide blades to guide the flows of the coolant to neighboring coolant channels, without disturbing the cross flows of the coolant which are originated from the mixing blades 27 of the inner strips. To allow the fuel rods 125 to be inserted into or removed from the reactor core without interference between the spacer grid 10 and the fuel rods 125, the guide vanes 57 and the guide taps 58 are alternately arranged along the upper edge of the perimeter strip. The guide taps 58 are also arranged along the lower edge of the perimeter strip at positions corresponding to the positions of the guide vanes 57 and the guide taps 58 of the upper edge, thus the guide taps 58 of the lower edge efficiently guide the fuel rods 125 while eliminating the interference between the spacer grid 10 and the fuel rods 125, during the insertion or removal of the fuel rods 125 into or from the reactor core.